

What is claimed is:

1. An improved non-spill water bottle cap for preventing water spillage when a water bottle is inverted to place on a water dispenser, the improved non-spill water bottle cap comprising:

a cylindrical plastic tube (10) with a plurality of holes (10a) arranged with a certain

5 pattern,

a spherical float (20) disposed inside of said cylindrical plastic tube (10) to control the water flow,

a plastic cap head (30) integrally formed with said cylindrical plastic tube (10) to cap on a port of said water bottle,

10 an edge frame (11) disposed at the end of said cylindrical plastic tube (10) for retaining said spherical float (20) inside said cylindrical plastic tube (10), and

an annular flange (13) with a plurality of peepholes (13a) located at the mouth of said plastic cap head (30) for retaining said spherical float (20) inside said cylindrical plastic tube (10).

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2. An improved non-spill water bottle cap as claimed in claim 1, wherein said annular flange (13) is oriented obliquely inward at the mouth of said plastic cap head (30) and the plurality of peepholes (13a) are located along the center of the annular flange (13) for allowing flow of air and water.

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3. An improved non-spill water bottle cap as claimed in claim 1, wherein said cylindrical plastic tube (10) further comprises an annular sealing ridge (12) for momentarily blocking the water flow path by contacting said spherical float (20) when the water bottle is inverted to place

on the water dispenser.

4. An improved non-spill water bottle cap as claimed in claim 3, wherein the diameter of said annular sealing ridge (12) is approximately one-fifth smaller than that of said spherical float (20) and said annular sealing ridge (12) is disposed at a location corresponding to approximately one-fourth the diameter of said spherical float (20) from the mouth of said plastic cap head (30).

5. An improved non-spill water bottle cap as claimed in claim 3, wherein said annular sealing ridge (12) and the tip of said annular flange (13) are designed to simultaneously contact the spherical float (20) by water pressure for momentarily blocking the water flow path of the water bottle.

6. An improved non-spill water bottle cap as claimed in claim 1, wherein the diameter of said transparent cylindrical plastic tube (10) is approximately one-fifth larger than that of said spherical float (20) for flow of air and water.